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## Descriptions of three new species of the genus *Anadrymadusa* Karabağ from Middle East (*Tettigoniidae*, *Orthoptera*)

Ahmet Ö Koçak<sup>1</sup> Muhabbet Kemal<sup>2</sup>

**Abstract:** Descriptions of three new species of the genus *Anadrymadusa* Karabağ from Middle East (*Tettigoniidae*, *Orthoptera*). *Cent. Ent. Stud., Misc. Pap.* 154: 1-6, 4 figs.

In this paper, three new species of the genus *Anadrymadusa* Karabağ are described. These are *Anadrymadusa modestalis* sp.n. from Hakkari (SE Turkey), *Anadrymadusa danensis* sp.n. from Israel, and *Anadrymadusa kosswigi* sp.n. from Mardin (SE Turkey). The nomenclatural status of last two species are discussed. Separately, *Ceraecercus fuscipennis* is also illustrated.

**Key words:** Taxonomy, nomenclature, description, fauna, Turkey, Israel, *Orthoptera*, *Tettigoniidae*, *Drymadusini*, *Anadrymadusa*, *Ceraecercus*.

Within the frame of the Cesa Project “Entomofauna of Turkey”, the following species of the genus *Anadrymadusa* Karabağ are described for the first time in accordance with the criteria of availability of the ICZN, mentioned in Chapter 4 (1999). The genus *Anadrymadusa* was proposed available by Karabağ (1961) and 4 species included: *retowskii*, *adzharica*, *ornatipennis*, and *spinicercis* (type-species). This genus is currently divided into two subgenera, i.e., *Orodusa* Bei-Bienko, 1964, and the nominate subgenus. The subgenus *Anadrymadusa* Karabağ contains eight nomenclaturally available specific names, namely, *adzharica* (Uvarov, 1934), *albomaculata* (Karabağ, 1956), *brevipennis* (Brunner von Wattenwyl, 1882), *curvicercis* (Uvarov, 1916), *ornatipennis* (Ramme, 1926), *recticauda* (Werner, 1903), *retowskii* (Adelung, 1907), and *spinicercis* (Karabağ, 1956). Two names, *danensis* and *kosswigi*, proposed by Karabağ (1972, 1975) respectively, are nomenclaturally unavailable; therefore, they cannot be used as valid names (ICZN, 1999, Art. 15.1) <sup>3</sup>. These taxa are described here for the first time in accordance with the criteria of availability, by using the previously published descriptive texts.

During an expedition of the authors in July 2003, at the mountainous area of Hakkari Province, called Dağlıca, near to the border of Iraq, a robust specimen of *Anadrymadusa* is discovered. Comparing with the available species of the *Anadrymadusa*, and *Ceraecercus fuscipennis* Uv.,<sup>4</sup> in our collection, we came to the conclusion that the captured specimen belongs to an undescribed species. The necessary diagnostic features of the new species, based upon the unique male, designated as holotype are given below:

<sup>1</sup><http://zoobank.org/?lsid=urn:lsid:zoobank.org:author:4755104C-24B4-4E00-8831-5F5E08B9E831>  
<http://www.researcherid.com/rid/C-3731-2009> e-mail [cesa\\_tr@yahoo.com.tr](mailto:cesa_tr@yahoo.com.tr)

<sup>2</sup> <http://zoobank.org/?id=urn:lsid:zoobank.org:author:671DD110-BDF1-49C8-964D-2A9251BE7824>  
<http://www.researcherid.com/rid/C-3734-2009> e-mail [muhabbet\\_kemal@yahoo.com.tr](mailto:muhabbet_kemal@yahoo.com.tr)

<sup>3</sup> Article 15.1. Conditional proposal. A new name or nomenclatural act proposed conditionally and published after 1960 is not thereby made available.

<sup>4</sup> This species resemble superficially to *Ceraecercus fuscipennis* Uv., related to *Anadrymadusa* in the tribe. *Ceraecercus fuscipennis* is easily distinguishable by two branched cerci of male, reduced wings, and markings. Compared material: 3 ♂♂ 1 ♀, W. Kazakhstan, Turkestan Syr Darja Karatau 750m 25 6 2000 A. Koçak & M. Kemal leg. (coll.Cesa) (figs. 3,4)

***Anadrymadusa (s.str.) modestalis* sp.n.**

Holotype ♂. Head brown, vertex dark brown, face lighter, dirty in appearance; blackish band between and behind eyes well developed. Pronotum flattened dorsally; upper surface dark brown with dirty appearance due to minute irregular dark markings; dark median line more distinct at posterior half; lateral lobe of pronotum dark brown, its lower part bordered by light brown with irregular dark brown markings.

Tegmina elongated; basal area almost equal in width with outer part. Anal area of the tegmina possesses three well defined cells, called here as “a”, “b”, and “c”. The cell “a” almost elliptical, transparent, vein at lower border curved and remarkably thickened and with two well marked teeth. The cell “b” almost triangle in shape, and transparent. The cell “c” trapezoidal, elongated above cells a, and b; transparent, except upper border below vein Cu1b. Costal margin of tegmina slightly concave in the middle; some veins more or less parallel to each other and approach to costa; major longitudinal veins, running above typical round light coloured spots, sinuated remarkably in middle of tegmina.

Colouration of wings: Tegmina reddish-brown, costal area paler, veins brown, intervenal parts with numerous irregular brownish striae and spots. Between veins numerous brown and greyish spots occur. In the middle 7 well marked, pale, roundish spots are typical. At base between the veins lozenge-shaped pale spots well developed. Base of hindwing yellowish-light brown, semi-transparent. Outer part with broad and brown band, not well bordered, tapering to anal area. Few pale yellowish spots obscure, rectangle, and narrow inside the brown band.

Legs well developed; colouration dirty dark brown in general; hind femur creamy to some degree only at basal part

External genitalia: Cercus very long, strong, rectangularly bent, with minute terminal spine, its outer part almost straight and 2.6 times longer than basal part.

**Material:** Holotype ♂ Turkey, Hakkari Province, Dağlıca, Yeşiltaş 1300m, 19 7 2003, leg. A.Ö.Koçak & M.Kemal (Coll. Cesa) <sup>5</sup>.

**Measurements:**

Total length (from head to tip of hindwing): 57 mm; body length: 36mm

Length of pronotum (dorsal): 10 mm ;

Length of tegmina: 46 mm, width of tegmina: 12 mm;

Length of post-femur: 37mm , post-tibia: 37 mm.

This new species is easily distinguishable from *A. kosswigi* especially by its larger size, venations, different structure of basal transparent cells, maculation of tegmina, and shape of cerci; from *A. curvicercis* Uv. especially by its different structure of basal transparent cells, venation of tegmina, maculation of tegmina and hindwing.

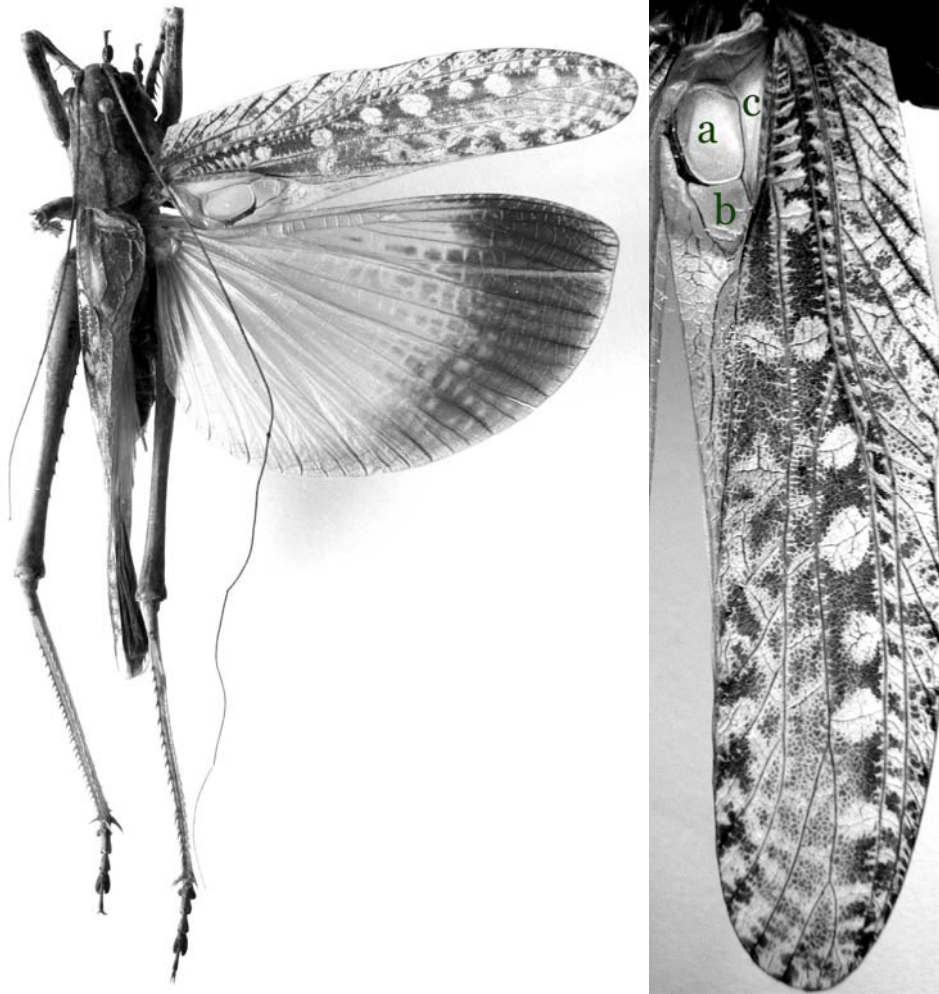
Single male of this species was captured in the afternoon, as in the case of *Ceraeocercus fuscipennis* in Kazakhstan.

Habitat of this species is rocky slopes with various trees and scrubs of hot valleys, representing *Quercetea brantii* of Zagrosian mountains in SE Turkey, N Iraq and W Iran.

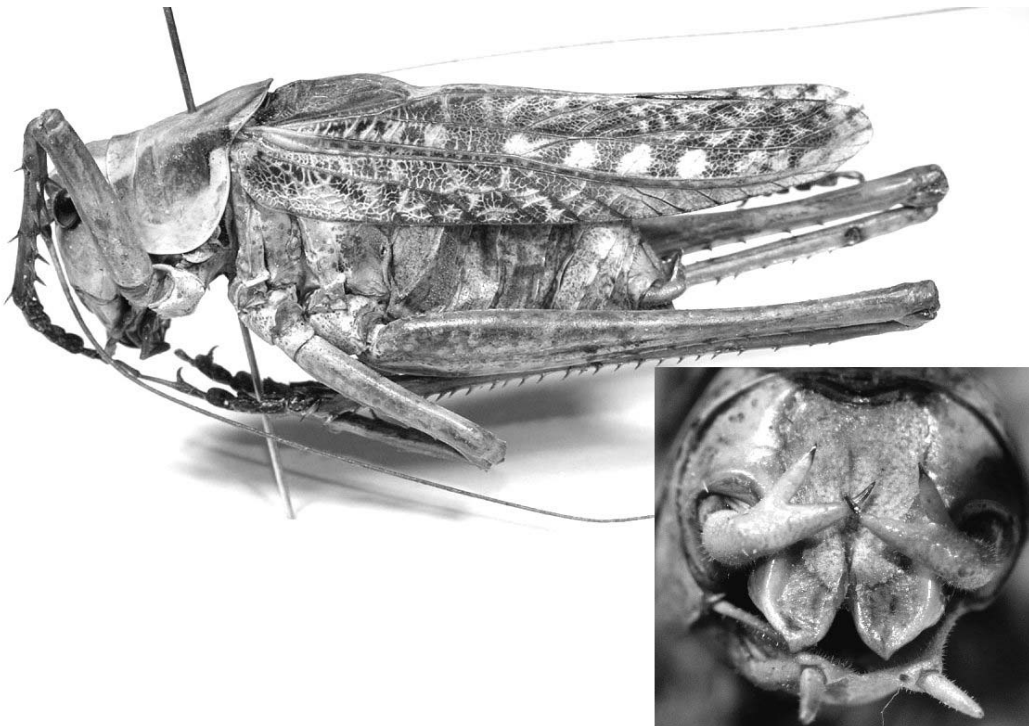
**Etymology:** *modest(y)* declares a kind of behaviour of human, which is favourite of the authors.

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<sup>5</sup> [urn:lsid:biocol.org:col:35261](http://urn:lsid:biocol.org:col:35261)



**Figs. 1,2.** *Anadrymadusa modestalis* n.sp. (holotype). Total appearance, and enlarged right tegmina with basal transparent cells (a-c).



**Figs. 3,4.** *Ceraecercus fuscipennis* Uvarov. Total appearance, and enlarged abdominal tip with branched cerci

***Anadrymadusa (s.str.) danensis* n.sp.**

Male (Holotype). A robust species. Fastigium of vertex approximately as wide as first antennal segment, with very slight median sulcus. Pronotum stout, longer than fore femur; prozona and mesozona convex; mesozona and metazona separated by a distinct depression, metazona convex with rounded posterior margin; first sulcus distinct, typical sulcus curved in middle of pronotum, median carina absent; lateral carinae indistinct, rounded at metazona; shoulder excision absent. Prosternum with a pair of long spines. Tegmina shorter than pronotum, extending beyond second abdominal tergite (holotype), or up to middle of fourth abdominal tergite (male paratype). Hind femur normal for the genus. Last abdominal tergite with a pair of very long, spine-like, divergent appendages. Cercus very long, rectangularly bent upwards towards middle, apical part longer than basal part; with strong apical tooth. Titillator relatively large, its basal branches narrowed at apex and shiny inside, its central branches delicate, compressed laterally, with a series of small and acute teeth. Subgenital plate much longer than wide, with deep, rounded apical excision; styli short.

Colouration light brown. Frons with complete transversal black band between eyes; the black band continues behind the eyes. Face unicolourous, light creamy. Pronotum without distinct pattern, mainly buff in colour; posterior edge of pronotum black laterally; pronotum with a blackish-brown longitudinal median line. Posterior margins of abdominal tergites with blackish spots. Tegmina with a series of rounded whitish spots. Fore and mid femur with narrow black ring near apex; fore and mid tibia with black ring near basal, as well as near apical parts. Ventral surface of tarsi black. Hind femur with longitudinal black spots on the upper surface of basal part with black ring near apex, and with two lines of black ventral spines in distal part. Apical part of ventral surface of hind tibia black; ventral spines of hind tibia basally black.

Female: More robust than male. Fastigium of vertex little wider than first antennal segment; median sulcus absent. Pronotum stronger than in male; prozona and mesozona distinctly convex; distinct transverse depression between mesozona and metazona; metazona flat; posterior margin as in male; first and typical sulci as in male; median carina absent; lateral carinae more distinguishable than in male. Prosternum as in male. Tegmina as in male, extending to end of third abdominal tergite. Fore femur thicker than in male; hind femur stronger than in male. Cercus regularly incurved with acute apex. Short, spine-like appendages on last abdominal tergite. Fifth and sixth abdominal sternites with distinct convexity, seventh sternite with distinct tubercle-like convexity. Ventral plate concave, wider than long; subgenital plate large, with shallow, obtus-angular apical excision. Ovipositor longer than half of hind femur, gradually downcurved.

**Measurements (in mm)**

<b>Body length</b>	male: 31.1 (holotype) 31.9	female: 30.0-35.0
<b>Length of pronotum</b>	male: 9.2 (holotype) 9.3	female: 9.2-10.4
<b>Length of tegmina</b>	male: 8.3 (holotype) 9.7	female: 8.0-9.2
<b>Length of hind femur</b>	male: 23.4 (holotype) 24.1	female: 26.0-27.5
<b>Length of ovipositor</b>	17.2-18.9	

Specimen of the new species were collected: 1 ♂ (holotype), 1 ♀ (paratype) Mount Hermon, 2000m above sea level, 26 viii 1969, leg. members of Kibutz Dan; 1 ♂ 2♀♀ (paratypes), Mount Hermon, 2000m above sea level, 9 ix 1971, leg. M.Broza & Y.Ayal. The male holotype and one female paratype are deposited in the British Museum (Nat. Hist.), London; one male and one female paratypes are in the collection of the Hebrew University



(Dept. of Entomology), Jerusalem<sup>6</sup>; one female paratype is in the collection of Systematic Zoology of the Ankara University.

This new species is similar to *A. brevipennis* (Br.-W.) but differs from it by the shape of the pronotum, longer apical part of the male cercus, shorter tegmina of the male, distinct convexity of the 5th-7th abdominal sternites and the concave ventral plate of the female, as well as by the shape of the ovipositor.

### ***Anadrymadusa* (s.str.) *kosswigi* n.sp.**

Male (Holotype): Fastigium of vertex without median sulcus (in some specimens there is an indistinct sulcus). Pronotum elegant and relatively small, metazona slightly flattened; first and typical sulcus distinct; median and lateral carinae absent. Prosternum with a pair of spines. Tegmina and wings fully developed, extending a little beyond hind knees. Last tergite with a pair of very long spine-like divergent appendages, which are gradually downcurved. Cercus very long, stout, rectangularly bent, with enlarged basal articulation. Titillator relatively large, its basal branches wide and strong, median branches long and slender, with a line of strong teeth. Subgenital plate longer than wide, with deep subangular excision, styli not very long, cylindrical.

General colouration reddish-brown; face uniformly creamy, a black fascia between eyes, which continuous behind them; occiput uniformly reddish-creamy. Pronotum with x-shaped pattern, its upper surface light brown, a large blackish spot on lateral lobe, a creamy band on lower edge of pronotal lateral lobe. Tegmina reddish-brown (in some specimens lighter or darker), with irregular whitish spots; wing with yellow, outer margin dark brown. Fore and middle tibiae with a black ring near basal and apical parts; hind femur light brown (in some specimens dark brown), with some black spots on basal upper edge, irregular blackish spots in a line on inner surface.

Female: A little larger than male. Pronotum more robust than in male, but its structure as in male. Tegmina and wings as in male. Abdominal sternites without convexity; bi-concave shiny plate wider than long. Subgenital plate large, with shallow acute-angular apical excision, its lobes convex. Ovipositor stout, a little shorter than half of hind femur, distinctly and regularly downcurved. Colouration as in male.

#### Measurements (in mm)

<b>Body length</b>	male: 27.1-28.3 (holotype)-29	female: 31.3-33.5
<b>Length of pronotum</b>	male: 7 (holotype)-7.2	female: 7.9-8.0
<b>Length of tegmina</b>	male: 28.7 (holotype)-30.8	female: 33.8-34.6
<b>Length of hind femur</b>	male: 27-27.2 (holotype)	female: 28.6-31.4
<b>Length of ovipositor</b>	13.7-14.2	

Mardin Province (S.E.Turkey), Mazıdağı 22 vi 1965, 14 ♂♂ (including holotype, in BMNH), 7 ♀♀ (T.Karabağ, S.Balamir and İ.Gümüşsuyu).

This interesting new species is related superficially to *Anadrymadusa danensis*, but differs from it in the typical pattern of pronotum, especially the yellow coloured wings, with dark brown apical fascia in both sexes, and also the smooth V., VI. and VII. sternites of the female.

### **Literature**

**International Commission on Zoological Nomenclature**, 1999, International Code on Zoological Nomenclature. Fourth Edition. published by the International Trust for Zoological Nomenclature, c/o The Natural History Museum - Cromwell Road - London SW7 5BD – United Kingdom

<sup>6</sup> "The collection was transferred in 2003 to the Department of Zoology, Tel Aviv University, Tel Aviv, Israel" (Pener, M.P., 2010, *Zootaxa* 2357: 68).

**Karabağ, T.**, 1961, Revision of *Drymadusa* Stein and related genera (Orthoptera, Tettigoniidae). – *Bull. Br. Mus. (Nat. Hist.) Ent.* 11 (1): 1-41, 136 textfigs.

**Karabağ, T.**, 1972, A new species of *Decticinae* (Orthoptera, Tettigoniidae) from Israel. – *Israel J. Zool.* 21: 99-102, figs.

**Karabağ, T.**, 1975, Studies in the Turkish Orthoptera (Insecta). I. New species and less known Tettigoniidae. – *J. nat. Hist.* 9 (3): 337-350, figs.

## Description of *Pezodrymadusa striolata* ssp. *ziyaretensis* ssp.n. from East Turkey (Tettigoniidae, Lepidoptera)

**Ahmet Ömer Koçak   Muhabbet Kemal**

**Abstract:** Description of *Pezodrymadusa striolata* ssp. *ziyaretensis* ssp.n. from East Turkey (Tettigoniidae, Lepidoptera). *Cent. Ent. Stud., Misc. Pap.* 154: 6.

In this paper, a new subspecies of *Pezodrymadusa striolata* is described from East Turkey.

**Key words:** Taxonomy, description, Turkey, *Pezodrymadusa striolata ziyaretensis*, *Drymadusini*, Tettigoniidae, Orthoptera.

In late summer of the year 2008, authors collected a female of *Pezodrymadusa striolata* Ramme, representing an unknown subspecies. Brief description is given below:

### ***Pezodrymadusa striolata ziyaretensis* ssp.n.**

Holotype ♀.-

General appearance similar to nominate subspecies; markings and colouration of head and pronotum less contrast; tegmina shorter, extending to the end of second tergite (in nominate subsp. to the end of third tergite), dark brown with minute light green spots (colour and shape of these spots different in nominate subsp.); ventral surfaces of hindfemur, hindtibia, as well as fore- and midfemur remarkably light green; abdominal tergites light brown with dirty brown 13-17 striae posteriorly (According to Karabağ (1961:28), abdomen and legs uniformly brown [nominate subsp.]).

Male unknown.

Length of the body: 34mm (except ovipositor), pronotum 9,5mm, tegmina 3mm (from dorsal), hindfemur 24mm, hindtibia 24mm, ovipositor 13mm. Proportion of pronotum/tegmina: 3.16 (this value in nominate subsp. is 2.15)

Material: Holotype ♀ East Turkey Sivas Prov., Gürün, Ziyaret 1900m 29 August, 2008 leg. M.Kemal (Coll. Cesa).

This species has been known only from its type locality, Üçkapılar Dağı (Niğde Province, Central Anatolia) since 1937.

### **Literature**

**Karabağ, T.**, 1961, Revision of *Drymadusa* Stein and related genera (Orthoptera, Tettigoniidae). – *Bull. Br. Mus. (Nat. Hist.) Ent.* 11 (1): 1-41, 136 textfigs.

**Ramme, W.**, 1951, Zur Systematik Faunistik und Biologie der Orthopteren von Südost-Europa und Vorderasien. *Mitt. zool. Mus. Berlin* 27: 1-431, 39 Taf., 134 Textabbildungen 3 Kartenskizzen.

## *Eupholidoptera feri* nom.nov., a replacement name for a species from Crete (*Tettigoniidae*, *Orthoptera*)

Ahmet Ömer Koçak   Muhabbet Kemal

**Abstract:** *Eupholidoptera feri* nom.nov., a replacement name for a species from Crete (*Tettigoniidae*, *Orthoptera*). *Cent. Ent. Stud., Misc. Pap.* 154: 7.

In this paper, a replacement name for a pre-occupied specific name in the family *Tettigoniidae* is proposed.

**Key words:** Nomenclature, Crete, *Eupholidoptera*, *Tettigoniidae*, *Orthoptera*.

Within the Project of the Cesa, Entomofauna of Old World, during preparation of the list of the valid species of *Orthoptera*, a pre-occupied specific name in the genus *Eupholidoptera* is noticed. Necessary nomenclatural explanation is summarized below:

### *Eupholidoptera feri* nom.nov

*Eupholidoptera rammei* was proposed by Willemse & Heller, 2001 [December] from Crete. This name is currently used in various publications as valid (Mofidi-Neyestanak & Quicke, 2007, *Zootaxa* 1562:43-53; Willemse & Willemse, 2008, *Articulata* Beiheft 13:26; Çıplak, Heller & Willemse, 2009, *Zootaxa* 2156: 58). On the other hand, *Uvarovistia rammei* was previously proposed by Katbeh Bader & Massa, 2001 [June] from Jordan. Massa (2010, *J. Entomol. Res. Soc.* 12(2): 77) synonymized *rammei* Katbeh Bader & Massa, 2001 with *Eupholidoptera peneri* Kaltenbach, 1969. As a result of this, *Eupholidoptera rammei* Willemse & Heller, 2001 became junior secondary homonym of *Uvarovistia rammei* Katbeh Bader & Massa, 2001 in the same genus *Eupholidoptera* Maran, 1953. In accordance with the related articles of the ICZN, a junior homonym cannot be used as valid name for a taxon. Therefore, a replacement name, *Eupholidoptera feri* nom.nov., for the pre-occupied *Eupholidoptera rammei* Willemse & Heller, 2001 nec Katbeh Bader & Massa, 2001, is proposed. New name is given to the first author of the preoccupied name, Fer Willemse, for his great contributions to the *Orthoptera* taxonomy.

### Literature

Katbeh Bader, A. & B. Massa, 2001 [June], *Tettigoniidae* (*Orthoptera*) from Jordan with description of new species and redescription of less known species. *J. Orthopt. Res.* 10: 25-37, figs.

Willemse, F. & K.-G. Heller, 2001 [December], Two new species of *Eupholidoptera* Maran (*Orthoptera*, *Tettigoniidae*) from Crete with a checklist and key to the species. – *Tijdsch. Ent.* 144: 329-343, figs. 1-52.

**C o n t e n t s :** Koçak, A.Ö. & M. Kemal, Descriptions of three new species of the genus *Anadrymadusa* Karabağ from Middle East (*Tettigoniidae*, *Orthoptera*), p. 1 - Koçak, A.Ö. & M. Kemal, Description of *Pezodrymadusa striolata* ssp. *ziyaretensis* ssp.n. from East Turkey (*Tettigoniidae*, *Lepidoptera*), p. 6 - Koçak, A.Ö. & M. Kemal, *Eupholidoptera feri* nom.nov., a replacement name for a species from Crete (*Tettigoniidae*, *Orthoptera*), p. 7 - Editorial, p. 7-8.

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